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R. Bruce Scott
Commissioner

FEB - 3 2010

STATE PLANNING AND ENVIRONMENTAL ASSESSMENT REPORT (SPEAR)

Regional Facilities Plan
City of Augusta, City of Brooksville & Northern Bracken County, Bracken County, Kentucky
AI 387; PLN20060001

The city of City of Augusta, City of Brooksville & Northern Bracken County has submitted for approval by the Energy and Environment Cabinet (EEC) a regional facility plan ***Wastewater Collection and Treatment System 201 Facility Plan Update*** dated October, 2005. In accordance with KRS Chapter 224 and 401 KAR 5:006, the Department for Environmental Protection (DEP) has prepared a State Planning and Environmental Assessment Report (SPEAR) that summarizes the regional facility plan.

The DEP is required to conduct reviews of the potential environmental impacts of projects applying for funding by the Clean Water State Revolving Fund in accordance with the procedures contained in the State Revolving Fund Operating Agreement between the Environmental Protection Agency Region IV and the Commonwealth of Kentucky. The DEP has included this required review in the attached SPEAR. The DEP has determined that the projects in the SPEAR will not have a significant effect on the environment when all mitigative measures in Section F of the SPEAR are implemented.

The SPEAR contains information supporting this determination in the following sections: A) Project Summary; B) Existing Environment; C) Existing Wastewater Facilities; D) Need for Project; E) Alternatives Analysis; F) Environmental Consequences, Mitigative Measures; G) Public Participation and User Rates; and H) Sources Consulted.

Interested persons are encouraged to submit comments on this SPEAR within 40 days of the above date. The EEC will take no action on this project until after the State Clearinghouse review and public comment period has ended, and will evaluate all comments before a decision is made to proceed with approval of the Regional Facilities Plan or awarding of SRF funds for this project. Send comments to Ms. Anshu Singh, Supervisor, Wastewater Planning Section, Water Infrastructure Branch, Division of Water, 200 Fair Oaks 4th Floor, Frankfort, Kentucky 40601, or by e-mail to anshu.singh@ky.gov, or call her at (502) 564-3410, extension 4805.

Sincerely,

R. Bruce Scott, Commissioner
Department for Environmental Protection

RBS/AS

STATE PLANNING AND ENVIRONMENTAL ASSESSMENT REPORT (SPEAR)
City of Augusta, City of Brooksville & Northern Bracken County
Bracken County, Kentucky
AI #387; PLN20060001

A. Project Summary and Funding Status

Project Summary: The cities of Augusta and Brooksville in Bracken County are proposing to build a new 690,000 gallons per day (gpd) regional wastewater treatment plant (WWTP) on the Ohio River near Augusta. According to the 2005 facility plan, which was submitted jointly by the two cities and Bracken County Fiscal Court, the new WWTP is needed to meet the current and future wastewater needs of the two cities and northern Bracken County.

The Planning area is shown in Figure 1 and the 20 years planning period is divided into the following three phases:

Phase I (0-2 years): This phase includes construction of 0.69 mgd regional WWTP in the city of Augusta, 465 gpm pump station at Brooksville's WWTP, 500 gpm pump station south of Chatham next to KY 19, 8" force main from Brooksville along KY-19 to KY-9 intersection, 10" forcemain from KY-9 to the new WWTP, 765 gpm pump station with 8" forcemain to the new WWTP to replace Augusta pump station, and 15" gravity outfall sewer to the Ohio River from the new WWTP. In addition, both cities plan to fund small projects to reduce infiltration and inflow in their respective collection systems. The total estimated cost of Phase I projects is $9,513,900.

Phase II (3-10 years): This phase involves extending sewer service to the industrial park and decommissioning the aging package plant that currently serves the park. Sewer service is also proposed along Route-19

Phase III (11-20 years): This phase involves extending sewer service westward along Route-1159 and other new populated areas.

The engineering firm that prepared the facilities plan is Burgess and Niple. The project is located in the Buffalo Trace Area Development District and within the area covered by the Florence Regional Office of the Division of Water (DOW).

Funding Status: The city of Augusta, City of Brooksville and Northern Bracken County intend to fund this project through a combination of loans and grants. These include Kentucky Infrastructure Authority (KIA) grants, State Revolving Fund loan, Community Development Block Grant, USDA Rural Development Loans and Federal Appropriation Grants

B. Existing Environment

Topography: Bracken County is located in the northern part of the Outer Bluegrass Region. The topography of the planning area is generally hilly with narrow ridges and steep slopes to thin

bed plains. A portion of the northeast and central portion of the planning area is comprised of slightly wider ridge tops with steep slopes to thin stream bed plains. There is 450 feet difference in land elevation between the southern and northern portions of the planning area. The geographic divide in the southern portion of the planning area near Brooksville represent the highest elevation at 950 feet. The lowest point in the planning area is at 505 feet amsl at the city of Augusta near the Ohio River.

Geology: In Bracken County, water is obtained from consolidated sedimentary rocks of Ordovician age and unconsolidated sediments of Quaternary age. The oldest rocks found on the surface in Bracken County are those of the Lexington Limestone, deposited in shallow seas 490 million years ago during the Middle Ordovician Period. In the Late Ordovician, the seas became relatively shallow, as indicated by the amounts of mud (shale) in the sediments. Over the last million years, unconsolidated Quaternary sediments have been deposited along the larger streams and rivers.

Soils: A majority of the soils in the planning area are composed of three main series, including Wheeling-Nolin-Otwell, Lowell-Nicholson and Eden. The Wheeling-Nolin-Otwell soils are deep, very level, well drained and have loamy subsoils. This soil type is located adjacent to the Ohio River on the north side of the planning area. Lowell-Nicholson soils are deep to very deep, gently sloping to moderately steep, well to moderately drained with clayey or loamy subsoils located on ridge tops and upper side slopes. The Eden soils are moderately deep, sloping to very steep, well to moderately drained with clayey subsoils found on ridge tops and side slopes. The Eden soil is the most prevalent soil type in the planning area. All the soil series have a somewhat limited to very limited suitability rating for sewage lagoons and septic tank absorption fields.

Surface Waters: The planning area is located primarily within the Licking River Basin Management Unit and multiple watersheds which include the Ohio River (near Augusta), Bracken Creek, Locust Creek (near Brooksville) and the North Fork of the Licking River (near Mt. Olivet). The planning area is drained by portions of Turtle Creek, Little Turtle Creek, Bracken Creek, Little Bracken Creek, the Ohio River, Locust Creek, Goose Creek, and Willow Branch. All of the surface water drainage that occurs within the planning area flows towards the Ohio River except for Willow Branch that drains into the North Fork of the Licking River.

Some of the surface water segments within the planning area have been assessed. According to the 2008 Ohio River 305(b) Report, river miles 541-593 fully support designated uses (warm water aquatic life, public water supply, and contact recreation); however dioxin and PCBs TMDLs are needed to restore the fish consumption use support. Segments of Bracken Creek and Locust Creek have been assessed per the 2008 Integrated Report to Congress on the Water Quality in Kentucky. The impaired segments are listed in Table 2, along with a notation regarding their TMDLs status.

Table 2. Assessed Segments not Supporting Designated Use(s), with TMDL status (source: 2008 Kentucky Integrated Report)			
Waterbody & Segment	Impaired Use Assessment	Causes	Sources
Bracken Creek 2.8 to 11.0	Partial Support Warmwater Aquatic Habitat; TMDL required	Nutrient/Eutrophication, Biological Indicators,	Animal Feed Operations (NPS), Crop Production (Crop Land or Dry Land), Grazing in Riparian or Shoreline Zones
Locust Creek 4.1 to 12.2	Nonsupport Primary Contact Recreation; TMDL required	Fecal Coliform	Unknown

Augusta Regional Water Treatment Plant and Bracken County Water District provides the water to the planning area.

Groundwater: About 2,450 residents (30 percent) of Bracken County rely on private domestic water supplies. The Ohio River alluvium is the best source of groundwater in the county. Many properly constructed wells will produce several hundred gallons per minute from the alluvium. Most wells will produce enough for a domestic supply at depths of less than 100 feet. Water is hard or very hard, but otherwise of good quality. In the lower third of the Licking River Valley, and the valleys of the lower sections of large creeks discharging into the Ohio River, most drilled wells will produce enough for a domestic supply at depths of less than 100 feet. Some wells located in the valleys of major creeks will produce enough water for a domestic supply except during dry weather. In the upland areas (80 percent of the county), most drilled wells will not produce enough for a dependable domestic supply; some wells along drainage lines may produce enough water, except during dry weather. Groundwater in these areas is hard or very hard, and may contain salt or hydrogen sulfide, especially at depths greater than 100 feet. According to the Groundwater Section of the Kentucky Division of Water, Bracken County has areas of low to moderate sensitivity to groundwater pollution. There are several permitted groundwater wells within the planning area that could receive added protection by eliminating improperly operating septic systems.

C. Existing Wastewater Facilities

Augusta Wastewater Treatment Plant: The city of Augusta owns and operates a 0.33 mgd wastewater treatment plant that discharges to the Ohio River at mile point 554.3 pursuant to the Kentucky Pollutant Discharge Elimination (KPDES) Permit No. KY0021261. The plant consists of one round package type plant, constructed above grade for the purpose of flood protection from the Ohio River. The package plant includes a raw wastewater screen and comminuter, a contact stabilization activated sludge aeration tank, final clarifier, aerobic digester and chlorine disinfection system. Two sand type sludge drying beds are also provided on-site. The annual average flow rate received at the plant from September 2008 to August 2009 was 0.241 mgd

with an annual average peak flow of 0.608 mgd. The package treatment plant is near the end of its useful life and should be replaced to remain in compliance with its discharge permit limits.

The monthly average effluent limits that must be met by the existing WWTP are as follows:

Parameter	Limits
BOD_5	30 mg/l
Total Suspended Solids	30 mg/l
Ammonia-Nitrogen	20 mg/l
Dissolved Oxygen	Not less than 2 mg/l
Total Phosphorus	Report
Total Nitrogen	Report
Total Residual Chlorine	0.011 mg/l
E. coli	130 colonies/100 ml

Augusta Collection System: The city of Augusta sanitary sewer collection system was mostly constructed in the 1930's. In 1980, the city built its WWTP and expanded its collection system. The older portion of the collection system is composed of 8" and 10" clay tile pipe with brick manholes. The new sections consist of precast concrete manholes with clay or PVC pipe with gasket joints. The system has five small pump stations ranging in pumping capacities 40 to 500 gallons per minute (gpm). A Sewer System Evaluation Survey (SSES) was completed as part of the facility plan update. The SSES results showed Augusta's collection system has excessive infiltration and inflow. The city will allocate $92,800 to correct the currently known deficiencies and include another $24,000 per year to cover the cost of additional investigation and corrections.

Brooksville Treatment Plant: The city of Brooksville owns and operates 125,000 gpd wastewater treatment plant that discharges to the unnamed tributary of Locust Creek at latitude 38°41'03"N and longitude 84°03'36"W pursuant to the Kentucky Pollutant Discharge Elimination (KPDES) Permit No. KY0025232. The wastewater treatment plant is located on the north side of Brooksville in a relatively deep valley. Wastewater flows from the city, which is located on ridge tops, flows to the plant site via two gravity sewers. A wetwell/drywell canned pump station lifts the wastewater up into the WWTP. The plant consists of one round package type plant constructed above grade. The plant includes a raw wastewater screen and communiter, contact stabilization activated sludge aeration tanks, final clarifier, aerobic digester and chlorine disinfection system. The annual average flow rate received at the plant from September 2008 to August 2009 was 94,000 gpd with an annual average peak flow of 136,000 gpd. The plant fails to meet the reliability and redundancy requirements of regulation 401 KAR 5:005 since it only has one process train. Also the sizing of the aeration tanks, final clarifier and the chlorine contact tank is insufficient. The chlorine contact tank does not have enough capacity to allow the minimum detention time of 15 minutes and the plant is unable to meet the *E. coli* permit limits.

The monthly average effluent limits that must be met by the existing WWTP are as follows:

Parameter	Limits
BOD_5	10 mg/l
TSS	30 mg/l
Ammonia-Nitrogen	4 mg/l (summer)/6 mg/l (winter)
Dissolved Oxygen	Not less than 7 mg/l
Total Phosphorus	Report
Total Nitrogen	Report
Total Residual Chlorine	0.011 mg/l
E. coli	130 colonies/100 ml

Brooksville Collection System: The City of Brooksville sanitary sewer collection system was constructed in 1970. Some minor additions and extensions have been completed since 1970. The sewer system is composed of 8" and 10" clay sewer pipe with gasket joints, precast concrete manholes and additions of PVC pipe. The system has 7 pump stations ranging from 30 to 350 gpm. A SSES was completed for the city of Brooksville as a part of the facility plan update. The study results revealed the collection system contains excessive I&I. The City has plans to spend $53,100 to correct the current deficiencies and allocate $19,000 per year for the next few years to cover the cost of additional investigations and corrections.

Package Treatment Plants and On-Site Systems: Several extended aeration package treatment plants ranging from 500 to 8,000 gallons per day capacity are located within the planning area. These include Augusta Health Care Center (8000 gpd; KPDES Permit No. KY0042170) in Augusta; Bowman (500 gpd; KYG400142), Carl (500 gpd; KPDES Permit No. KYG400275), Clark (500 gpd; KPDES Permit No. KYG400438; inactive), Hartman (500 gpd; KPDES Permit No. KYG400495), Stewarts Farm Supply (500 gpd; KPDES Permit No. KY R000841), Wilson (500 gpd; KPDES Permit No. KYG400433) and KTC Garage (500 gpd; KPDES Permit No. KYG500090) in Brooksville; and Hall (500 gpd; KPDES Permit No. KYG400966), Johnson (500 gpd; KPDES Permit No. KYG400331) and Perkins (500 gpd; KPDES Permit No. KYG400360) in Foster. There is a 5,000 gpd Industrial Park package treatment plant in Bracken County (KPDES Permit No. KY0103187), but it does not receive any wastewater flow. Developments in Bracken County outside the service areas of the cities of Augusta and Brooksville rely on septic tanks to meet their wastewater needs. According to Bracken County Health Department most of the existing on-site systems are working properly and when a non-complaint system is found repair work orders are filed and the corrections are completed by the system owner.

D. Need for Proposed Project

Population in the planning area is projected to increase from 2247 in year 2000 to 3841 in 2025 and the wastewater flows are projected to increase from the current 530,000 gpd average flow to 690,000 gpd average flow in 2025. In addition age has taken its toll on the existing wastewater treatment facilities in the City of Augusta and City of Brooksville and it would be costly to

replace what is needed and still maintain the level of treatment necessary to comply with the discharge permit limits. Moreover the City of Brooksville's WWTP fails to meet the reliability and redundancy requirements of regulation 401 KAR 5:006 and is out of compliance with its KPDES permit limits. Decommissioning the aged WWTPs and replacing them with a new regional WWTP to meet the current and future wastewater needs of both cities and northern Bracken County could also improve the water quality of the local streams.

E. Alternatives Analysis

Wastewater Treatment Alternatives:

Alternative No 1- No Action Alternative: This alternative will involve the continued use of the existing wastewater treatment plants in Augusta and Brooksville, the various package plants and rural on-site systems. This alternative is not feasible because these plants are aged and in bad condition and will deteriorate further with continued use. In a few years they will not be able to meet the effluent limits. This alternative is rejected because it is not environmentally responsible and does not meet the wastewater treatment needs of the planning area.

Alternative No. 2 – Augusta and Brooksville Treatment Plant Replacement: This alternative proposes replacing the existing Augusta and the Brooksville wastewater treatment plants with new plants without changing the existing permitted capacity of both plants. This will involve construction of Augusta WWTP on a new site since the existing site does not have sufficient space to construct a new plant and the current plant is on a lot that is about 12 feet below the 100-year flood elevation and is suffering from bank erosion. However, the new Brooksville WWTP will be constructed on the existing WWTP site while the existing plant is in operation. It will also include replacement of the influent pump station. The estimated project cost is $8,220,000 (Augusta WWTP-$4,890,000 and Brooksville WWTP-$3,330,000) with a 20-year present worth of $13,007,420. This alternative was rejected because it provides minimal ability to serve the areas that were previously unserved, and will provide very little improvement to the surrounding environment. Without an expansion the existing WWTPs will not be able to meet the 20 year wastewater needs of the planning area.

Alternative No. 3 – Regional Wastewater Treatment in Augusta: This alternative will involve construction of a new 0.69 mgd WWTP in Augusta and decommission of the City of Brooksville WWTP and connecting to the City of Augusta's WWTP. The proposed single stage activated sludge plant with biological nitrogen removal will include gravity grit removal, mechanical screen with standby bar rack, two aeration tanks each with an anoxic and an aerobic zone, two 55' final clarifiers, three 340 gpm RAS/WAS pumps, ultraviolet light disinfection, cascade aerator, 195,000 gallon aerobic digester/sludge holding tank and a control building. The plant will discharge to the Ohio River at milepoint 553.9 and the proposed monthly average discharge limits will be as follows:

Parameter	Limits
BOD_5	30 mg/l
Total Suspended Solids	30 mg/l
Ammonia-Nitrogen	20 mg/l
Dissolved Oxygen	2 mg/l
Total Residual Chlorine	0.019 mg/l
Total Phosphorus	Report
Total Nitrogen	Report
E. coli	130 colonies/100 ml
Reliability Classification	Grade 3

The total estimated project cost is $9,368,000 with a 20-year present worth cost of $12,730,715. **This is the selected alternative because it will help both cities and the County meet their current and future wastewater needs and improve the environment.**

F. Environmental Consequences, Mitigative Measures

Impacts on Historic Properties and Archeological Sites:
In a letter dated September 22, 2009, the Kentucky Heritage Council stated that the location of the new wastewater treatment plant will need to be surveyed by a professional archaeologist. There are numerous sites in the vicinity including two that contain human burials that will require Native American consultation if they are to be disturbed. A report documenting the results of this investigation must be submitted to State historic Preservation Officer (SHPO) for review, comment and approval. The pump stations and lines within existing state right-of-ways do not need to be surveyed but any lines or pump stations outside of the right-of-way will need to be surveyed by a professional archaeologist and the report must be submitted to SHPO for review, comment and approval. Where a given project area or portions thereof have been disturbed by prior construction, documentation of that disturbance must be filed with SHPO and an opinion concerning the need of an archaeological survey must be requested.

Impacts on Threatened and Endangered Species:
In a letter dated October 7, 2009, the Kentucky Department of Fish & Wildlife Resources stated that as per the Kentucky Fish and Wildlife Information System (KFWIS) state/federal threatened and endangered species are known to occur within close proximity of the proposed project area. However, the KDFWR does not expect impacts to listed species due to the location and nature of the project.

In a letter dated September 28, 2009, the United States Fish and Wildlife Services (USFWS) stated that due to potential changes in the status of federally listed threatened and endangered species, and possible additions to the Federal endangered species list, the Service can only provide comments on Phase I at this time. The USFWS stated that according to the information provided to them and as per their database two federally listed species have the potential to occur within the project vicinity. These include Indiana bat (*Myotis sodalis*) and Running Buffalo Clover (*Trifolium stoloniferum*).

To avoid potential impact to the Indiana bats population, the USFWS recommended following options:

1) Conduct a survey of the project area for suitable winter habitat (caves, rockshelters, abandoned underground mines) and agree to remove trees in the project area only between October 15 and March 31 in order to avoid impacting summer roosting bats
2) If tree clearing is required during the period of April 1 to October 14 then either a biological survey of the project area should be conducted to determine the presence or absence of the species within the project area, with coordination with USFWS on the survey plan and results; or the applicant should enter into a Conservation Memorandum of Understanding (MOA) with the Service. By entering into a Conservation MOA with the Service, Cooperators can gain flexibility in project timing with regard to the removal of suitable Indiana bat habitat.

To avoid potential impact to running buffalo clover, USFWS recommended survey of the project area to determine the presence or absence of buffalo clover within the project area by a qualified biologist and submission of the report to USFWS for review and approval. However, survey will not be necessary if sufficient site-specific information is available that shows that there is no potentially suitable habitat within the project area or its vicinity; or the species is not present within the project area or its vicinity due to site-specific factors.

Impacts on Wetland and Streams:

In a letter dated October 7, 2009, the Kentucky Department of Fish & Wildlife Resources (KDFWR) recommended that erosion control measures be developed and utilized during any construction to minimize siltation into nearby waterways. Such erosion control measures may include, but are not limited to silt fences, stalked straw bales, brush barriers, sediment basins, and diversion ditches. Erosion control measures will need to be installed prior to construction and should be inspected and repaired regularly as needed. In prior letter dated November 28, 2006, KDFWR, listed the following five recommendations for portions of the projects that cross intermittent and perennial streams;

1) Development/excavation during a low flow period to minimize disturbance;
2) When crossing a stream, the pipe should be laid perpendicular to the stream bank to minimize the direct impacts to the streambed;
3) Proper placement of erosion control structures below highly disturbed area to minimize entry of silt to the stream;
4) Return all disturbed instream habitat to its original condition upon completion of construction in the area, and;
5) Preservation of tree canopy overhanging the stream.

In a letter dated September 28, 2009, the USFWS (FWS# 2007-B-0331) recommended that project plans should be developed to avoid impacting wetland areas and/or streams, and they reserve the right to review any required federal or state permits at the time of public notice issuance. The US Army Corps of Engineers (USACE) should be contacted to assist in determining if wetlands or other jurisdictional waters are present or if a permit is required. The USACE in a letter (LRL-2009-1028-pjl) dated November 20, 2009, stated that authorization under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and/or Section 404 of the Clean water Act (33 USC 1344) may be required. Additional detailed information on the

project's design, scope and construction methods and purpose should be provided in order to determine if a permit is required prior to construction.

Impacts on Floodplains:
A floodplain construction permit is required from the DOW's Surface Water Permits Branch, Floodplain Management Section, if there are any disturbances in the 100-year floodplain.

Impacts on Forests:
There are currently no state forests or champion trees located in the area, however special care should be taken around any existing trees that will remain after the construction is complete. Heavy equipment should be kept away from the base of the tree to prevent wounding of the trunk or surface roots. Construction traffic should be routed away from the dripline of the tree to lessen the severity of soil compaction. Compacted soil reduces the amount of water available to the tree, and this lack of water can cause added stress. Stressed trees are vulnerable to insect and disease infestation. After construction is completed, consider replanting back suitable tree species.

Impacts on Air:
Kentucky Division for Air Quality Regulation 401 KAR 63:010 Fugitive Emissions states that no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored without taking reasonable precaution to prevent particulate matter from becoming airborne. Additional requirements include the covering of open bodied trucks, operating outside the work area transporting materials likely to become airborne, and that no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. Please note the Fugitive Emissions Fact Sheet located at http://www.air.ky.gov/homepage_repository/e-Clearinghouse.htm

Kentucky Division for Air Quality Regulation 401 KAR 63:005 states that open burning is prohibited. Open Burning is defined as the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the outdoor atmosphere without passing through a stack or chimney. However, open burning may be utilized for the expressed purposes listed on the Open Burning Fact Sheet located at http://www.air.ky.gov/homepage_repository/e-Clearinghouse.htm

Miscellaneous Impacts:
The environmental impact of constructing the proposed facilities includes those temporary impacts of noise, dust, and traffic disruption in the construction area. The proposed project will improve the surface water and groundwater quality over the next 20 years. This action will also provide a planned development for economic growth in the planning area.

G. Public Participation and User Rates

A public hearing was held on September 22, 2005, at the Watson Community Building/Brooksville City Building. The public hearing was advertised in The Bracken County News on September 8, September 15 and September 22, 2005. No adverse public comments

were received. The Division of Water is not aware of any unresolved public objections that may have been voiced before or after the public meeting in relation to the proposed project. The current monthly sewer rate based on 4,000 gallons of usage is $18.28 for Augusta and $24.89 for Brooksville. The monthly rates are expected to be in the range of $24 to $56 depending on the amount of grants the city can secure.

H. Sources Consulted or to be Consulted

Kentucky Department for Public Health
Kentucky Department of Fish & Wildlife Resources
Kentucky Division for Air Quality
Kentucky Division of Forestry
Kentucky Division of Waste Management
Kentucky Division of Water
Kentucky Heritage Council
Kentucky State Clearinghouse
Natural Resources Conservation Service Web Soil Survey
U.S. Fish & Wildlife Service
Kentucky Geological Survey website
City of Augusta and Brooksville
Burgess & Niple
Judge-Executive, Bracken County
Buffalo Trace Area Development District

PROJECT PHASING:

0–5 YEAR – NEW WWTP NEAR AUGUSTA, PUMP STATIONS AT BROOKSVILLE AND NEAR CHATHAM, FORCE MAIN ALONG RTE 19 FROM BROOKSVILLE TO AUGUSTA, AND CONNECT TO ADJACENT PROPERTIES ALONG THE FORCE MAIN.

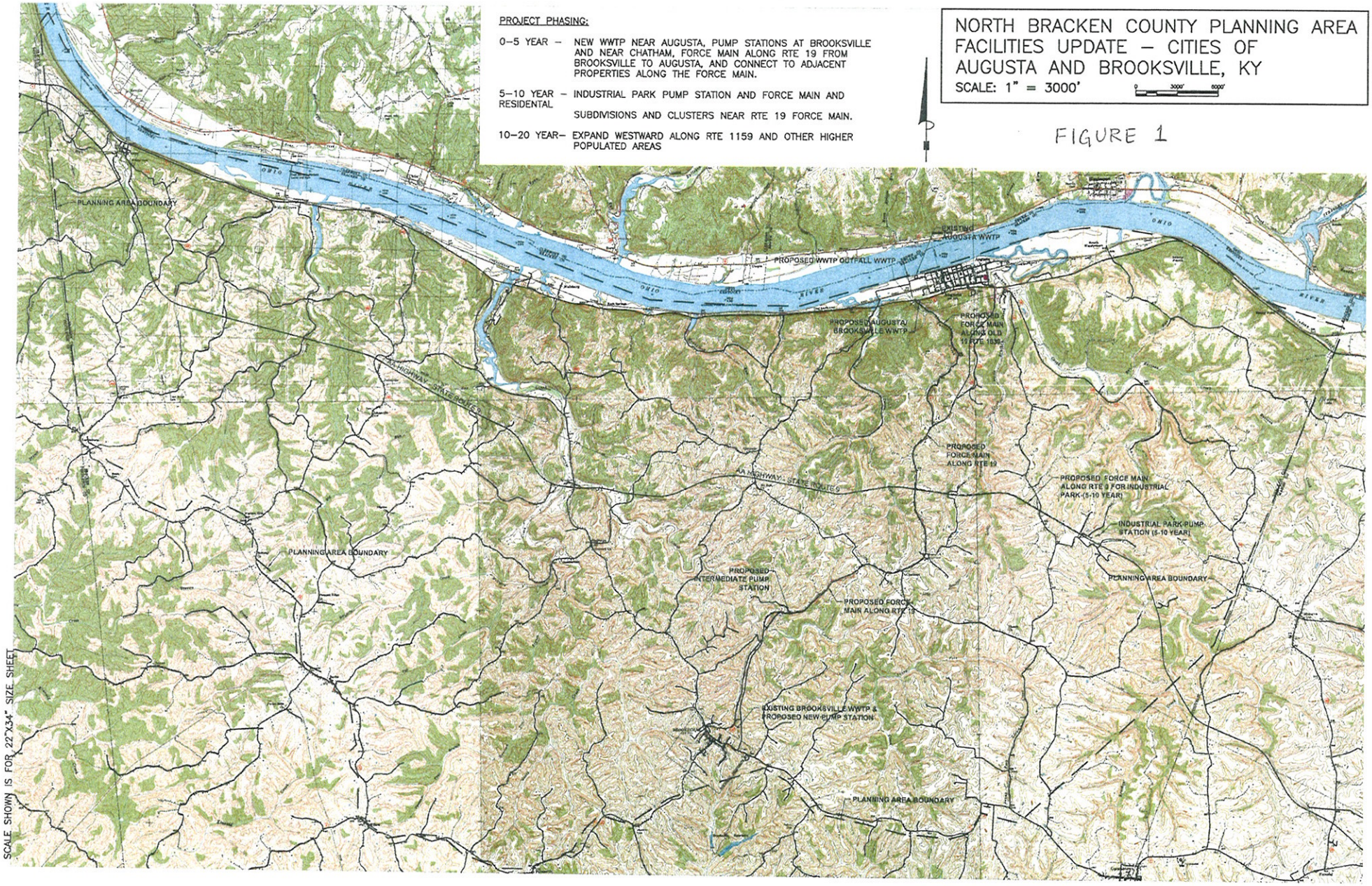
5–10 YEAR – INDUSTRIAL PARK PUMP STATION AND FORCE MAIN AND RESIDENTAL SUBDIVISIONS AND CLUSTERS NEAR RTE 19 FORCE MAIN.

10–20 YEAR– EXPAND WESTWARD ALONG RTE 1159 AND OTHER HIGHER POPULATED AREAS

NORTH BRACKEN COUNTY PLANNING AREA FACILITIES UPDATE – CITIES OF AUGUSTA AND BROOKSVILLE, KY

SCALE: 1" = 3000'

FIGURE 1



SCALE SHOWN IS FOR 22"X34" SIZE SHEET